

J. MURPHY

1644 RUSH

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RAW SEQUENCE LISTING  
PATENT APPLICATION US/09/313,299B

DATE: 03/29/2000  
TIME: 10:10:42

Input Set: I313299B.RAW

This Raw Listing contains the General Information  
Section and up to first 5 pages.

P.5

ENTERED

1 <110> APPLICANT: Lee, James  
2 Wood, William I.  
3 <120> TITLE OF INVENTION: VEGF-RELATED PROTEIN  
4 <130> FILE REFERENCE: P0963R1D1  
5 <140> CURRENT APPLICATION NUMBER: US/09/313,299B  
6 <141> CURRENT FILING DATE: 1999-05-17  
7 <150> EARLIER APPLICATION NUMBER: US 08/706,054  
8 <151> EARLIER FILING DATE: 1996-08-30  
9 <150> EARLIER APPLICATION NUMBER: US 60/003,491  
10 <151> EARLIER FILING DATE: 1995-09-08  
11 <160> NUMBER OF SEQ ID NOS: 12  
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18 <222> LOCATION: 1-2031  
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23 ccgaatgcgg ggagctcgga tgtccggttt cctgtgaggc ttttacctga 150  
24 caccgcggc ctttccccgg cactggctgg gagggcgccc tgcaaagtgt 200  
25 ggaacgcgga gccccggacc cgctcccgcc gcctccgggt cgcccagggg 250  
26 gggtcgcccg gaggagcccg ggggagaggg accaggaggg gcccgcgggc 300  
27 tcgcagggggc gcccgcgccc ccaccctgc ccccgccagc ggaccgggtc 350  
28 cccacccccg gtccttccac catgcacttg ctgggcttct tctctgtggc 400  
29 gtgttctctg ctgcgcgctg cgctgctccc gggtcctcgc gaggcgcccc 450  
30 ccgccgccc cgccttcgag tccggactcg acctctcgga cgcggagccc 500  
31 gacgcgggcg aggccacggc ttatgcaagc aaagatctgg aggagcagtt 550  
32 acgggtctgtg tccagtgtag atgaactcat gactgtactc taccagaat 600  
33 attggaataat gtacaagtgt cagctaagga aaggaggctg gcaacataac 650  
34 agagaacagg ccaacctcaa ctcaaggaca gaagagacta taaaatttgc 700  
35 tgcagcacat tataatacag agatcttgaa aagtattgat aatgagtggg 750  
36 gaaagactca atgcatgcc cgggaggtgt gtatagatgt ggggaaggag 800  
37 tttggagtcg cgacaaacac cttctttaa cctccatgtg tgtccgtcta 850  
38 cagatgtggg ggttgctgca atagtgggg gctgcagtgc atgaacacca 900  
39 gcacgagcta cctcagcaag acgttatattg aaattacagt gcctctctct 950  
40 caaggcccca aaccagtaac aatcagtttt gccaatcaca cttcctgccg 1000  
41 atgcatgtct aaactggatg tttacagaca agttcattcc attattagac 1050  
42 gttccctgcc agcaacacta ccacagtgtc aggcagcgaa caagacctgc 1100  
43 cccaccaatt acatgtggaa taatcacatc tgcagatgcc tggctcagga 1150  
44 agattttatg ttttcctcgg atgctggaga tgactcaaca gatggattcc 1200

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RAW SEQUENCE LISTING  
PATENT APPLICATION US/09/313,299BDATE: 03/29/2000  
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47      agacagaaac tcatgccagt gtgtctgtaa aaacaaactc tccccagcc 1350
48      aatgtggggc caaccgagaa tttgatgaaa acacatgcc a gtgtgtatgt 1400
49      aaaagaacct gccccagaaa tcaaccctta aatcctggaa aatgtgcctg 1450
50      tgaatgtaca gaaagtccac agaaatgctt gttaaaagga aagaagttcc 1500
51      accaccaaac atgcagctgt tacagacggc catgtacgaa ccgccagaag 1550
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53      ttcataattgg aaaagaccac aaatgagcta agattgtact gttttccagt 1650
54      tcatcgattt tctattatgg aaaactgtgt tgccacagta gaactgtctg 1700
55      tgaacagaga gacccttgtg ggtccatgct aacaaagaca aaagtctgtc 1750
56      tttcctgaac catgtggata actttacaga aatggactgg agctcatctg 1800
57      caaaaggcct cttgtaaaga ctggttttct gccaatgacc aaacagccaa 1850
58      gattttcctc ttgtgatttc tttaaaagaa tgactatata atttatttcc 1900
59      actaaaaata ttgtttctgc attcattttt atagcaacaa caattggtta 1950
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67      <221> NAME/KEY: Human
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72      catgatataa aaatattgat cacagtgagt tttaccaatt gttgttgcta 100
73      taaaaatgaa tgcagaaaca atatttttag tggaaataaa ttatatagtc 150
74      attcttttaa agaaatcaca agaggaaaat cttggctggt tggtcattgg 200
75      cagaaaacca gtctttacaa gaggcctttt gcagatgagc tccagtccat 250
76      ttctgtaaag ttatccacat gggttcaggaa agacagactt ttgtctttgt 300
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78      aacacagttt tccataatag aaaatcgatg aactggaaaa cagtacaatc 400
79      ttagctcatt tgtggtcctt tccaatatga agggacacaa cgacacactt 450
80      cttcactata tgaaaatcct gggtcacaaag ccttctggcg gttcgtacat 500
81      ggccgtctgt aacagctgca tgtttggtgg tggaaacttct ttccttttaa 550
82      caagcatttc tgtggacttt ctgtacattc acaggcacat tttccaggat 600
83      ttagggggtg atttctgggg caggttcttt tacatacaca ctggcatgtg 650
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86      agctggcagg ccgaagcccc gctctgcaga cacactgaca ggtctcttca 800
87      tccagctcct tgtttggtcc acagatgtca tggaaatccat ctgttgagtc 850
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89      agatgtgatt attccacatg taattggtgg ggcaggctct gttcgctgcc 950
90      tgacactgtg gtagtggtgc tggcagggaa cgtctaataa tggaatgaac 1000
91      ttgtctgtaa acatccagtt tagacatgca tcggcaggaa gtgtgattgg 1050
92      caaaactgat tgttactggg ttggggcctt gagagagagg cactgtaatt 1100
93      tcaataacg tcttgctgag gtagctctgt ctggtgttca tgcactgcag 1150
94      ccctcacta ttgcagcaac ccccatctct gtagacggac acacatggag 1200
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RAW SEQUENCE LISTING  
 PATENT APPLICATION US/09/313,299B

DATE: 03/29/2000  
 TIME: 10:10:42

Input Set: I313299B.RAW

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95      gtttaaagaa ggtgtttgtc gcgactccaa actccttccc cacatctata 1250
96      cacacctccc gtggcatgca ttgagtcttt ctccactcat tatcaatact 1300
97      tttcaagatc tctgtattat aatgtgctgc agcaaatttt atagtctctt 1350
98      ctgtccttga gttgaggttg gcctgttctc tgttatgttg ccagcctcct 1400
99      ttccttagct gacacttgta ctttttccaa tattctgggt agagtacagt 1450
100     catgagttca tctacactgg acacagaccg taactgctcc tccagatctt 1500
101     tgcttgcata agccgtggcc tcgcccgcgt cgggctccgc gtccgagagg 1550
102     tcgagtcagg actcgaaggc ggcggcgggc gcgggcgcct cgcgaggacc 1600
103     cgggagcagc acagcggcga gcagagaaca cgccacagag aagaagccca 1650
104     gcaagtgcac ggtggaagga ccgggggttg gggaccggtc cgctggcggg 1700
105     ggcaggggtg ggggcgcggg cggccctgcg aggcgcggg cccctcctgg 1750
106     tccctctccc ccgggtcctt cccggcgacc cccctgggc gagccggagg 1800
107     cggcgggagc gggtcggggg ctccgcgttc ccaactttgc agggcgccct 1850
108     cccagccagt accggggaaa ggcggcgggg gtcaggtaaa agcctcacag 1900
109     gaaaccggac atccgagctc cccgcattcg gagccgcga ggtgaagcga 1950
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&lt;210&gt; SEQ ID NO 3

&lt;211&gt; LENGTH: 419

&lt;212&gt; TYPE: PRT

&lt;213&gt; ORGANISM: Human

&lt;220&gt; FEATURE:

&lt;221&gt; NAME/KEY: Human

&lt;222&gt; LOCATION: 1-419

&lt;223&gt; OTHER INFORMATION: Sequence source: VRP

&lt;400&gt; SEQUENCE: 3

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123     Ala Ala Leu Leu Pro Gly Pro Arg Glu Ala Pro Ala Ala Ala Ala
124           20           25           30
125     Ala Phe Glu Ser Gly Leu Asp Leu Ser Asp Ala Glu Pro Asp Ala
126           35           40           45
127     Gly Glu Ala Thr Ala Tyr Ala Ser Lys Asp Leu Glu Glu Gln Leu
128           50           55           60
129     Arg Ser Val Ser Ser Val Asp Glu Leu Met Thr Val Leu Tyr Pro
130           65           70           75
131     Glu Tyr Trp Lys Met Tyr Lys Cys Gln Leu Arg Lys Gly Gly Trp
132           80           85           90
133     Gln His Asn Arg Glu Gln Ala Asn Leu Asn Ser Arg Thr Glu Glu
134           95          100          105
135     Thr Ile Lys Phe Ala Ala Ala His Thr Asn Thr Glu Ile Leu Lys
136          110          115          120
137     Ser Ile Asp Asn Glu Trp Arg Lys Thr Gln Cys Met Pro Arg Glu
138          125          130          135
139     Val Cys Ile Asp Val Gly Lys Glu Phe Gly Val Ala Thr Asn Thr
140          140          145          150
141     Phe Phe Lys Pro Pro Cys Val Ser Val Tyr Arg Cys Gly Gly Cys
142          155          160          165
143     Cys Asn Ser Glu Gly Leu Gln Cys Met Asn Thr Ser Thr Ser Tyr
144          170          175          180

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**RAW SEQUENCE LISTING**  
**PATENT APPLICATION US/09/313,299B**

 DATE: 03/29/2000  
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Input Set: I313299B.RAW

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145   Leu Ser Lys Thr Leu Phe Glu Ile Thr Val Pro Leu Ser Gln Gly
146           185           190           195
147   Pro Lys Pro Val Thr Ile Ser Phe Ala Asn His Thr Ser Cys Arg
148           200           205           210
149   Cys Met Ser Lys Leu Asp Val Tyr Arg Gln Val His Ser Ile Ile
150           215           220           225
151   Arg Arg Ser Leu Pro Ala Thr Leu Pro Gln Cys Gln Ala Ala Asn
152           230           235           240
153   Lys Thr Cys Pro Thr Asn Tyr Met Trp Asn Asn His Ile Cys Arg
154           245           250           255
155   Cys Leu Ala Gln Glu Asp Phe Met Phe Ser Ser Asp Ala Gly Asp
156           260           265           270
157   Asp Ser Thr Asp Gly Phe His Asp Ile Cys Gly Pro Asn Lys Glu
158           275           280           285
159   Leu Asp Glu Glu Thr Cys Gln Cys Val Cys Arg Ala Gly Leu Arg
160           290           295           300
161   Pro Ala Ser Cys Gly Pro His Lys Glu Leu Asp Arg Asn Ser Cys
162           305           310           315
163   Gln Cys Val Cys Lys Asn Lys Leu Phe Pro Ser Gln Cys Gly Ala
164           320           325           330
165   Asn Arg Glu Phe Asp Glu Asn Thr Cys Gln Cys Val Cys Lys Arg
166           335           340           345
167   Thr Cys Pro Arg Asn Gln Pro Leu Asn Pro Gly Lys Cys Ala Cys
168           350           355           360
169   Glu Cys Thr Glu Ser Pro Gln Lys Cys Leu Leu Lys Gly Lys Lys
170           365           370           375
171   Phe His His Gln Thr Cys Ser Cys Tyr Arg Arg Pro Cys Thr Asn
172           380           385           390
173   Arg Gln Lys Ala Cys Glu Pro Gly Phe Ser Tyr Ser Glu Glu Val
174           395           400           405
175   Cys Arg Cys Val Pro Ser Tyr Trp Lys Arg Pro Gln Met Ser
176           410           415           419
177   <210> SEQ ID NO 4
178   <211> LENGTH: 147
179   <212> TYPE: PRT
180   <213> ORGANISM: Human
181   <220> FEATURE:
182   <221> NAME/KEY: Human
183   <222> LOCATION: 1-147
184   <223> OTHER INFORMATION: Sequence source: VEGE-121
185   <400> SEQUENCE: 4
186   Met Asn Phe Leu Leu Ser Trp Val His Trp Ser Leu Ala Leu Leu
187       1           5           10           15
188   Leu Tyr Leu His His Ala Lys Trp Ser Gln Ala Ala Pro Met Ala
189           20           25           30
190   Glu Gly Gly Gly Gln Asn His His Glu Val Val Lys Phe Met Asp
191           35           40           45
192   Val Tyr Gln Arg Ser Tyr Cys His Pro Ile Glu Thr Leu Val Asp
193           50           55           60
194   Ile Phe Gln Glu Tyr Pro Asp Glu Ile Glu Tyr Ile Phe Lys Pro

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**RAW SEQUENCE LISTING**  
**PATENT APPLICATION US/09/313,299B**

 DATE: 03/29/2000  
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Input Set: I313299B.RAW

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195              65              70              75
196      Ser Cys Val Pro Leu Met Arg Cys Gly Gly Cys Cys Asn Asp Glu
197              80              85              90
198      Gly Leu Glu Cys Val Pro Thr Glu Glu Ser Asn Ile Thr Met Gln
199              95              100             105
200      Ile Met Arg Ile Lys Pro His Gln Gly Gln His Ile Gly Glu Met
201              110             115             120
202      Ser Phe Leu Gln His Asn Lys Cys Glu Cys Arg Pro Lys Lys Asp
203              125             130             135
204      Arg Ala Arg Gln Glu Lys Cys Asp Lys Pro Arg Arg
205              140             145             147
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207      <211> LENGTH: 149
208      <212> TYPE: PRT
209      <213> ORGANISM: Human
210      <220> FEATURE:
211      <221> NAME/KEY: Human
212      <222> LOCATION: 1-149
213      <223> OTHER INFORMATION: Sequence source: PIGE-131
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216          1              5              10              15
217      Gly Leu Ala Leu Pro Ala Val Pro Pro Gln Gln Trp Ala Leu Ser
218              20              25              30
219      Ala Gly Asn Gly Ser Ser Glu Val Glu Val Val Pro Phe Gln Glu
220              35              40              45
221      Val Trp Gly Arg Ser Tyr Cys Arg Ala Leu Glu Arg Leu Val Asp
222              50              55              60
223      Val Val Ser Glu Tyr Pro Ser Glu Val Glu His Met Phe Ser Pro
224              65              70              75
225      Ser Cys Val Ser Leu Leu Arg Cys Thr Gly Cys Cys Gly Asp Glu
226              80              85              90
227      Asn Leu His Cys Val Pro Val Glu Thr Ala Asn Val Thr Met Gln
228              95              100             105
229      Leu Leu Lys Ile Arg Ser Gly Asp Arg Pro Ser Tyr Val Glu Leu
230              110             115             120
231      Thr Phe Ser Gln His Val Arg Cys Glu Cys Arg Pro Leu Arg Glu
232              125             130             135
233      Lys Met Lys Pro Glu Arg Cys Gly Asp Ala Val Pro Arg Arg
234              140             145             149
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236      <211> LENGTH: 299
237      <212> TYPE: DNA
238      <213> ORGANISM: Unknown
239      <220> FEATURE:
240      <223> OTHER INFORMATION: Sequence source: EST
241      <220> FEATURE:
242      <221> NAME/KEY: unsure
243      <222> LOCATION: 74
244      <223> OTHER INFORMATION: unknown base

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**Please Note:**

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

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VERIFICATION SUMMARY  
PATENT APPLICATION US/09/313,299B

DATE: 03/29/2000  
TIME: 10:10:42

Input Set: I313299B.RAW

Line ? Error/Warning

Original Text

-----  
247 W "N" or "Xaa" used: Feature required

-----  
aacaccagca cgagctacct cagnaagacg ttatttga